IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Neelakantan Sundaresan	)	
Serial No.: 09/502,818	)	
Filed: February 11, 2000	)	**Examiner**:
Title: "System and Method for the	)	Channavajjala, Srirama T.
Automatic Generation of Dynamic	)	**Art Unit**: 2177
Search Abstracts"	)	
Attorney Docket No.: ARC-00-0004-US1	)	

Board of Patent Appeals and Interferences

Commissioner of Patents and Trademarks

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APPELLANT'S REPLY BRIEF TO EXAMINER'S ANSWER

Dear Sir:

This Reply is submitted in response to the Examiner's Answer dated April 29, 2003, to the Appeal Brief filed on February 10, 2003.

Applicant reasserts and incorporates all the arguments made in the previously Appeal Brief, and further presents the following arguments, specifically in response to the Examiner's Answer, with respect to the representative claim 1.

ARGUMENTS

(1) Kravets does not disclose "automatically generating dynamic search abstracts".

(2) Kravets does not disclose "if the link repository contains new link information about the preliminary result set, and updates the selected abstracts based on the new link information, if any, to generate the dynamic search abstracts".

Claim 1 is reproduced herein for the reader's convenience:

1. A system for automatically generating dynamic search abstracts, comprising:

a crawler for crawling documents and acquiring metadata and link information from the documents;

a metadata repository for storing the metadata acquired by the crawler;

a link repository for storing link information acquired by the crawler;

an abstract engine for generating abstracts of the documents from the metadata;

an indexing engine for periodically indexing the metadata and the link information;

a search engine for applying a search query to the metadata indexed by the indexing engine, to generate a preliminary result set containing selected abstracts; and

wherein the search engine inquires if the link repository contains new link information about the preliminary result set, and updates the selected abstracts based on the new link information, if any, to generate the dynamic search abstracts."

The foregoing arguments will now be discussed in more detail to address the Examiner's arguments.

(1)   Kravets does not disclose "automatically generating dynamic search abstracts"

The gist of this argument is twofold, to be expanded upon later in view of the Examiner's ground for rejection:

(1)A: Applicant has clearly defined the terms "abstracts" and "dynamic" in the specification and thus cannot be redefined in hindsight by the Examiner.

(1)B: Kravets' link information cannot and must not be equated with abstracts.

Examiner states that "As to Claims 1,6,11, 17, Kravets teaches a system which including 'automatically generating dynamic search abstracts' [see Abstract, col 2, line 47-52, line 53-56], **fig 11**], Kravets teaches search engine for refining, filtering and organizing search queries and search results as detailed in Abstract, especially **fig 11** is the query result corresponds to abstracts." Emphasis added.
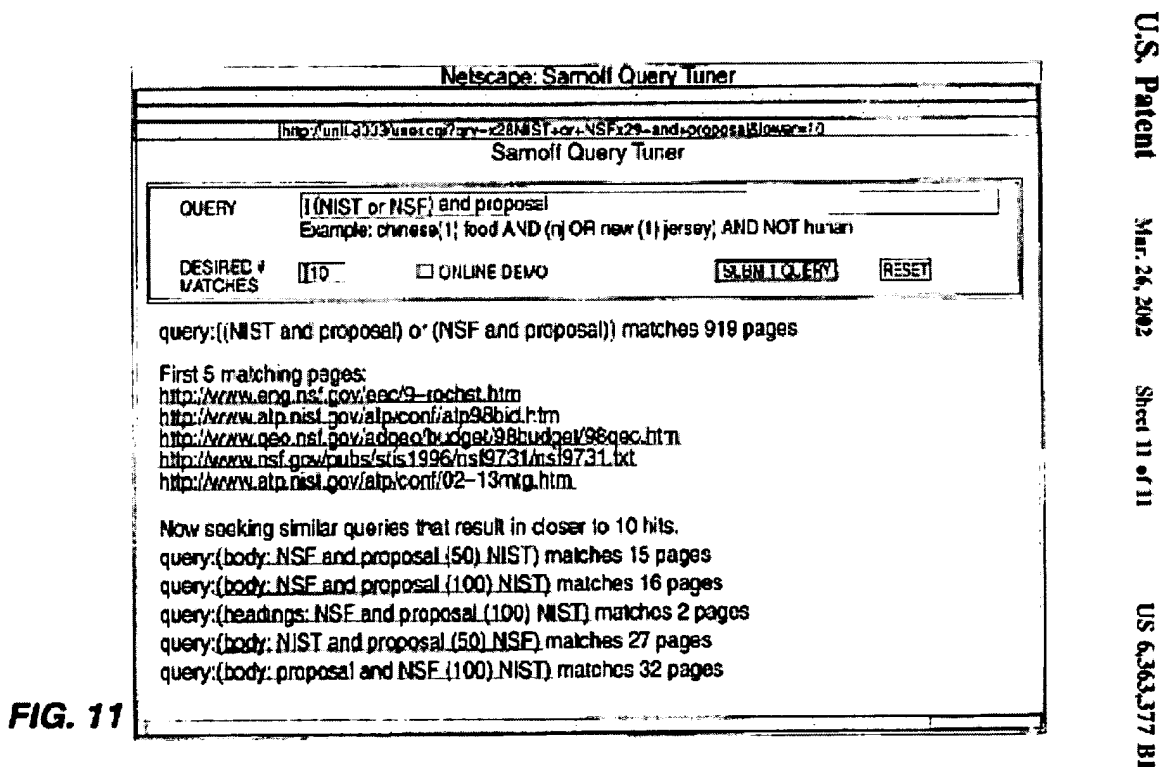
Applicant provides the following definition of the term "abstract," at page 3, lines 8-9, of the present application:

"In addition to the hyperlink, certain search result pages include **a short summary or abstract that describes the content of the URL location**." Emphasis added.

Since the term "abstract" has been clearly defined, and the invention described and claimed in view of this definition, <u>Examiner is not permitted to redefine the term abstract to mean links</u>, as shown and described in Fig. 11. It should be very clear that **<u>the search results in Fig. 11 of Kravets are links and not abstracts</u>**.

The instant claims, as represented by claim 1, provide for link information, but they also provide for abstracts as well. <u>The Examiner seems to be using both terms, abstracts and links, interchangeably, and is thus clearly prohibited from so doing.</u>

For the convenience of the reader, Fig. 11 of Kravets has been reproduced below to clearly illustrate the fact that the ground relied upon by the Examiner is not accurate. More specifically, the link information in Fig. 11 do not describe **the content** of the URL locations, but rather constitute the URL locations.

FIG. 11

In addition, Applicant has also clearly defined the term "dynamic", at page 4, lines 12-14 of the present application, as follows:

> "An additional challenge that dilutes the efficacy of searches includes **the dynamic, i.e., continuously changing nature of the web pages and the pages they point to,** and the inability of the crawlers to efficiently update the data and metadata contained in the web pages and in the pages pointing to them." Emphasis added.

Applicant respectfully submits that the link information in Kravets' Fig. 11, are static, in that they do not continuously change. In other terms, once these links are retrieved as search results, they become static, in that their nature (i.e., dynamic or static) is no longer questioned or reassessed.

Furthermore, Applicant has taken the additional clarificative step of elaborating the term "dynamic abstract", at page 14, lines 13-15 of the present application, as follows:

> "If new information exists, this information is fed to the abstract engine 140, which, in turn, generates **a real time updated or dynamic abstract 190 for each of the qualifying result entries.**" Emphasis added.

Simply stated, Kravets does not disclose "automatically generating dynamic search abstracts" as taught by the present invention.

(2)   Kravets does not disclose "if the link repository contains new link information about the preliminary result set, and updates the selected abstracts based on the new link information, if any, to generate the dynamic search abstracts"

Applicant notes that this is a very significant feature of the present invention as recited in claim 1. The gist of Applicant's argument is quite straight forward: The text cited by the Examiner simply does not disclose the following elements:

A.   inquiring "if the link repository contains new link information about the preliminary result set"

B.   "updates the selected abstracts based on the new link information, if any"

C.   "to generate the dynamic search abstracts."

More specifically, the Examiner founded his rejection of this important feature on the following "search engine inquires if the link repository contains new link information about preliminary result set, and updates the selected abstracts based on the new link information, if any, to generate the dynamic search abstracts' [col 11, line 33-41, col 12, line 6-23, line 42-52]".

For the reader's convenience, Applicant has reproduced below the texts cited by the Examiner, and requests the Examiner to make specific and explicit correlations between the three missing elements (A, B, C) noted above, and the following excerpts:

Column 11, lines 33 - 41 read as follows:

"As with the meta-data, there is a hierarchy for the keywords. For example, as shown in FIG. 10(a), the top of the hierarchy is represented by cell 1010 and "keyword" corresponds to the most restrictive search query. Second on the hierarchy is cell 1012 corresponding to a broader search that can be done with the "all the English stemmings of keyword". Cell 1014 is at the bottom of the hierarchy and corresponds to the broadest search query related to "keyword or any of its synonyms".

Column 12, lines 6 - 23 read as follows:

"The formulation of related queries according the query hierarchies is illustrated based on a sample query Q=((title;cryptographic) BEFORE.sub.1 (title;protocols)) AND ((English language) AND (dated after Jan. 1, 1997)). The term item is used to refer to any atomic part of the query: a meta-datum, a keyword or a Boolean operator. For example, Q contains the following set of items {title, cryptographic, BEFORE.sub.1, title, protocols, AND, English language, AND, dated after Jan. 1, 1997}. For each query item t, define h(t) to be the node in the hierarchy forest corresponding to the item t. Related queries consists of a set of queries, each of which takes the original user query and modifies some items in it by either restricting or broadening them according to the hierarchy forest. The act of broadening (restricting) a query item t corresponds to using a descendant (an ancestor) of h(t) in place of t within Q. For example, one set of related queries for our sample query Q is shown in Table 3."

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Column 12, lines 42 - 52 read as follows:

"The exemplary tree shown in FIG. 10(b) indicates that the search can be contracted or restricted by moving up the tree. In addition, it indicates that the search can be expanded by moving down the tree. For example, a search limited to x AND y according to cell 1040 can be restricted by moving up the tree and searching according to cell 1050 where the search is restricted to x NEARn y. In contrast, the search can be expanded by moving down the tree and searching for only x according to cell 1030 or searching for only y according to cell 1035. The search can be further expanded by searching for x OR y according to cell 1020."

This feature of the present invention and its advantages, are clearly explained throughout the specification. When a user enters a search query, the indexing engine does not present the preliminary search result based on the metadata stored in the metadata repository as is traditionally done, but rather inquires if the metadata repository or the link repository contains new information for each result entry in the result set. If new information exists, this new information is fed to the indexing engine so as to generate an updated or dynamic abstract, on a real time basis, for the result entry. This dynamic abstract will contain more up to date information than an abstract generated by traditional means.

Applicant agrees with the Examiner that Nasr describes an abstract engine, and further states that Nasr doesn't add much to the substance of Kravets, even if these two references were combined. Such a hypothetical combination, if allowable, will still lack the important elements and features of claim 1, as presented earlier.

To conclude, independent claim 1 is not obvious in view of Kravets and Nasr, and as a result, claim 1 and the claims dependent thereon are allowable, and such allowance is respectfully requested.

Independent claims 6, 7, and 11 are allowable for similar reasons as presented earlier in favor of allowance of claim 1, since claims 6, 7, and 11 contain substantially similar elements and limitations as in claim 1. As a result, the independent claims 6, 7, and 11 and the claims dependent thereon are allowable, and such allowance is respectfully requested.

CONCLUSION

For the foregoing reasons, it is earnestly submitted that all the claims on file are in condition for allowance. The allowance of all the pending claims and the reversal of the Examiner's decision are respectfully requested.

Authorization is hereby given to charge any additional fees or credit any overpayments that may be deemed necessary to Deposit Account No. 09-0441.

Respectfully submitted,

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